

Fermilab Central Web Service
Apache Tomcat Quick Start Guide
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1. Getting Started

Tomcat is an add-on feature to the Central Web Apache/Linux service. In this document, we provide information specific to Tomcat. If you haven't already, please thoroughly read the general Central Web documentation at https://servicedesk.fnal.gov/kb_view.do?sysparm_article=KB0011347.

Your Tomcat applications will have the same permissions as described for a Tier 2 website in the above documentation, meaning that they can write to both the htdocs directory and the data directory.

2. Deploying Applications

Tomcat applications are stored in the webapps subdirectory of the website root. (For example: /web/sites/t/tools.fnal.gov/webapps)

Both application directories and WAR files are supported.

When an application is placed in the webapps directory it will be deployed automatically by Tomcat.

Re-deploying an existing application can be done two ways. Touching the timestamp of the WEB-INF directory will cause Tomcat to reload the application. Alternatively, a redeploy command can be issued through the Tomcat manager (see following section).

Once deployed, the application should be access by appending “/app/” followed by the application directory name. For example, if an application named HelloWorld is deployed to /web/sites/w/web-test01.fnal.gov/webapps/HelloWorld, the URL would become <https://web-test01.fnal.gov/app/HelloWorld>.

3. Tomcat Web Application Manager

Tomcat includes a built-in application called the Tomcat Web Application Manager. It is installed to your website by default and can be accessed by going to <http://YOURSITE.fnal.gov/manager>. You will need to sign in with your SERVICES credentials.

The manager allows you to stop, start, and redeploy your applications.

You can also view the list of open sessions to your application.

4. Clustering & Application Longevity

When developing your application, please keep in mind that it is being hosted on a shared cluster of server.

Applications placed in the webapps directory will be loaded on both the primary and secondary servers in the cluster.

During normal operation, only the primary server receives web requests. However, if the primary server goes down, requests will be routed to the secondary server where your application will have a separate memory state from the primary server.

Please also be aware that the Tomcat server and your application instance may be restarted at any time, not preserving memory state.

For these reasons, persistent (or semi-persistent) data should be stored on the NAS or in an external database.

5. Libraries & Dependencies

Any libraries that your application depends on that are not provided by Tomcat out of the box will need to be bundled into your application. You should place them inside the WEB-INF directory under WEB-INF/classes/ or WEB-INF/lib/ if they are JAR files.

6. Using SSO with Tomcat

For enabling SSO on your website, see SSO on CWS Linux for Content Editors at <http://cd-docdb.fnal.gov/cgi-bin/ShowDocument?docid=5685>.

Once it is enabled, you can access the SSO variables as HTTP request headers from within a Tomcat application.

For example:

```
String ssoUserId = request.getHeader("SSO_USERID");
```